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Bechuanaland Protectorate.


*Annual Medical and Sanitary Report
For the Year 1932.*

*Printed by
Waterlow & Sons, Limited,
London Wall, London,
1933.*

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BECHUANALAND PROTECTORATE.

ANNUAL MEDICAL AND SANITARY REPORT.

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SECTION 1. - ADMINISTRATION.

(a) Staff. (As at the 31st December, 1932).

European :

Principal Medical Officer.
4 Medical Officers.
2 Medical Officers, (Temporary appointments).
2 Subsidised Medical Missionaries.
2 Hospital Matrons.
4 Staff Nurses.
1 Welfare Nurse.
2 Dispensers.
1 Principal Medical Officer's Clerk.

Native :

1 Dispenser.
2 Pupil Dispensers.
3 Medical Orderlies.
4 Male Nursing Orderlies.
5 Female Nurses.

Appointments, Changes, etc., in the Staff.

Dr. Alexander Skinner, M.B., Ch.B., resigned on 9th July, 1932.

Dr. Gerard M. Malan, M.B., Ch.B., resigned on 31st March, 1932, to take up appointment as District Surgeon in the Health Department of the Union of South Africa.

Dr. Donald J.D. Henderson, M.B., Ch.B., F.R.C.S.E., Medical Officer, Lobutsi, granted $4\frac{1}{2}$ months' Sick Leave from 15th April, 1932, to 14th June, 1932, and again from 9th July, 1932, to 25th September, 1932.

Dr. Edgar W. Thompson, M.B., Ch.B., (Manchester), M.R.C.S., L.R.C.P., appointed Temporary Medical Officer on 4th April, 1932 and posted to Gaberones.

Dr. Rudolph Meyerstein, M.B., Ch.B. (C.T.) appointed Temporary Medical Officer on 11th October, 1932, and posted to Ngamiland, vice Dr. Gerber invalided from that station.

Dr. David J.M. MacKenzie, M.B., Ch.B. (Ed.),
appointed Temporary Medical Officer from 11th April, 1932,
to 13th June, 1932, to relieve Dr. Henderson on Sick
Leave.

Dr. Thomas S. McDonald, M.B., Ch.B. (Dublin),
appointed Temporary Medical Officer from 6th July, 1932,
to 5th October, 1932, to relieve Dr. Henderson on Sick
Leave.

Staff Nurse C.H. Mitchell appointed Matron, Serowe
Hospital, on 1st April, 1932.

Staff Nurse E.M. Verney appointed Matron, Lobatsi
Hospital, on 1st April, 1932. Resigned on 30th June, 1932.

Miss R.D. Daly appointed Matron, Lobatsi Hospital,
on 29th May, 1932, vice Miss E.M. Verney. Resigned on
31st August, 1932

Staff Nurse O.M. Weiss appointed Acting Matron,
Lobatsi Hospital, on 1st September, 1932, vice Miss R.D.
Daly.

Staff Nurse S.M. Harrison resigned on 30th June,
1932.

Miss M.S. Thompson appointed Staff Nurse on 15th
June, 1932, and posted to Lobatsi Hospital, vice Staff
Nurse Harrison.

Miss I.M. Southey appointed Staff Nurse on 1st
September, 1932, and posted to Lobatsi Hospital on
appointment of Staff Nurse Weiss to Acting Matron.

Miss E. Haile appointed Welfare Nurse (Subsidised)
at Serowe on 1st December, 1932, under the aegis of the
London Missionary Society.

Postings of Staff on 31st December, 1932.

Mafeking :

Principal Medical Officer, Hamilton W. Dyke, M.B.
1 Clerk
1 Native Medical Orderly.

Francistown :

Medical Officer, Desmond Drew, B.A., M.B., Ch.B.
1 European Dispenser, H.F. Bennett
1 Native Pupil Dispenser.

Serowe :

Medical Officer, Austin Morgan, B.A., M.B., Ch.B., B.A.O.
Matron Miss C.H. Mitchell
1 Staff Nurse Miss E.F. Cannon
1 Subsidised Welfare Nurse Miss E. Haile.
1 European Dispenser T.E. Booker.
1 Native Orderly
2 Native Male Nursing Orderlies.
2 Native Female Nurses (Probationers).

Gaberones :

Medical Officer, Edgar W. Thompson, M.B., Ch.B.
M.R.C.S., L.R.C.P.
1 Native Male Orderly

Lobatsi :

Medical Officer, Donald J.D. Henderson, M.B., Ch.B.
F.R.C.S.E.
Matron (Acting) Miss O.M. Weiss
(Miss M.G. Gutridge
3 Staff Nurses (Miss M.S. Thompson
(Miss I.M. Southey
1 Native Dispenser
2 Native Male Nursing Orderlies
3 Native Female Nurses (Probationers).

Ngamiland :

Medical Officer, R. Meyerstein, M.B., Ch.B.
1 Native Orderly.

Tuli Block :

(Vacant)

Kanye :

Medical Missionary (Subsidised). A.N. Tonge, M.D.,
L.R.C.P. & S.
1 Trained Nurse, Miss Bain.

Mochudi :

Medical Missionary (Subsidised). (Vacant):
1 Trained Nurse. Miss Waal.

Molepolole :

Medical Missionary. P.M. Shepherd, M.B. Ch.B., D.T.M.
1 Trained Nurse Miss Ross.

During the year 1932 the Medical Services of the Department were maintained with considerable difficulty. Dr. Skinner had to be withdrawn from Ngamiland on account of ill-health. Shortly afterwards he tendered his resignation from the Service. Dr. Gerber, who succeeded him in Ngamiland, had likewise to be withdrawn for health reasons. The health of Dr. Henderson, Medical Officer, Lobatsi, caused considerable anxiety and he had to be granted four and a half months Sick Leave. Dr. McDonald, who was engaged to relieve Dr. Henderson, became very seriously ill within four weeks of his temporary appointment, and during the remainder of his period of service he was in Hospital. Changes in the European Nursing Staff added to the difficulties experienced.

These frequent changes in such a small Medical and Nursing Staff make it very difficult to carry out a systematic and progressive programme of work and development.

Mochudi was without a Medical Missionary for ten months of the year and during that time valuable work was performed by a Dutch Reformed trained Nurse - Miss Waal - under the direction of the Medical Officer, Gaberones, who visited Mochudi weekly. Dr. Shepherd, the Medical Missionary at Molepolole, was absent for two months and during that time the medical work was maintained by Nurse Ross of the United Free Church of Scotland, under the

supervision of the Medical Officer, Gaberones, who visited Molepolole weekly.

Medical service to the European and Native personnel of the Rhodesian Railways operating between Mafeking and Bulawayo is supplied by the Medical Officers of this Administration whose stations are in proximity to the Railway line.

(b) List of Ordinances affecting Public Health during the year - Nil.

(c) Financial - in respect of financial year ending 31st March, 1932.

Ordinary Revenue :

Hospital and Dispensary Fees.	£ 667
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Being an increase on Revenue for 1930-31 of	£ 219
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Revenue for calendar year 1932, approximately.	£ 530
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Being a decrease on that of 1931 of approximately	£ 70
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Ordinary Expenditure :

Personal Emoluments.	£8,095
Other Charges	4,530

£12,625

Total Revenue of Protectorate for 1931-32.	£106,735
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Total Expenditure of Protectorate for 1931-32.	£162,560
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Relation of Medical Expenditure to Total Expenditure.	7.76%
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Expenditure from Capital Loan of £4,000 from Colonial Development Fund for erection of additional buildings at Lobatsi and Serowe Hospitals.	£ 216
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SECTION II - PUBLIC HEALTH.

During the year under review there was a very general and widespread epidemic of Influenza, but otherwise the health of the Territory generally was much as usual.

The rainfall in most of the districts, though late, was good, and late crops of Maize and Kaffir corn (Millet) were generally fair. This probably is responsible for the lower incidence of Scurvy than that of 1931. The rainfall for the whole Territory, as recorded at the various Government Meteorological stations, was 19.95 inches for 1932 as against 17.76 inches for 1931. At six of the eleven recording stations it was over 20 inches for the year, the highest record being at Francistown where it reached 28.52 inches. The expectation that with a higher rainfall there would have been more Malaria was not generally borne out as will be seen from a table in the paragraph on Malaria.

Of the general and epidemic diseases, comment is called for on the following :-

Scurvy : 108 Definite cases presented themselves for treatment at Government Dispensaries whereas in 1931 there were 140 cases. With very few exceptions all the cases occurred among natives living in their villages and not in labour camps. Actual cases of Scurvy are simply one of the signs of the general malnutrition that exists generally throughout the Territory and which will be dealt with under a separate heading of this Report.

Respiratory Diseases. 135 Cases of Pneumonia and 91 cases of Broncho-Pneumonia were treated at the Government Dispensaries - a total of 226 cases as compared with 93

in the previous year. This high rate was due to the extensive Influenza epidemic. These figures only represent those cases seen by European Medical Officers, but from information elicited, many more cases occurred that did not seek European assistance. There was the usual amount of subacute Bronchitis that generally affects the country in the late Winter and Spring months.

Diseases of the Digestive System. Under this heading there is nothing special to note except that there were fewer cases of Diarrhoea recorded than in the previous year. The Medical Officer at Serowe states that Diarrhoea was noticeably infrequent. He attributes this to a newly-installed village water system which was completed by Government towards the end of 1931. The capital and maintenance charges are paid for from Tribal funds. It consists of a bore hole near the centre of the village, 140 ft. deep, from which 1,000 gallons per hour of first-rate drinking water are pumped into a reservoir. Here the women of the village, numbering up to 3,000 or 4,000 a day, draw their water supply for domestic purposes. Previous to this the water was obtained from wells sunk in the near-by water course. These wells were totally unprotected from pollution. The wonder is that, with such insanitary water supplies, there were not more frequent outbreaks of gastro-intestinal troubles.

Syphilis, again was responsible for almost a third of the total first attendances at the Dispensaries. There were 9,412 new cases which, in terms of the whole native population, means that approximately 5% of the total native population presented itself during the year for anti-Syphilitic treatment. Unfortunately, with the limited means at our disposal, and owing to the ignorance of the

people as to the need for continued treatment, there seems at present very little hope of controlling this scourge. Unfortunately the dramatic effect of one or two injections of Arsenical or Bismuth preparations, which cause disappearance of the visible manifestations, leads the patients to think they are cured, and they discontinue treatment before the disease has been eradicated from the system; or they return for treatment very irregularly. Only by continued propaganda will this ignorance be dispelled. Another factor militating against the control of the disease is that there is no social stigma attached to it. It is among the Bechuana a misnomer to refer to it as "Venereal" disease, as a large proportion of secondary infections are seen in children, indicating that infection has been caused either by means of eating utensils or - less frequently - congenitally, and not in the generally recognised way.

Yaws. There has been no apparent increase in the incidence of this disease. 118 Cases were seen in 1932 as against 117 in 1931. Dr. Drew, Medical Officer at Francistown, who has been in this Service since 1921, states that the first case he saw was in 1922. It was in the tertiary stage; and at that time, and for some years, doubt was thrown by his colleagues on his diagnosis of Yaws. It was only in 1930 that he became convinced that Yaws actually did exist in the Protectorate by seeing some typical secondary stage cases. Since then other Medical Officers have confirmed his observations. As far as his experience goes, Yaws is less formidable in the Bechuanaland Protectorate than in the East African Colonies. His observations lead him to

believe that in the Bechuanaland Protectorate infection by contagion is of a low degree. Generally his experience is that one case may come from a village and then no more from that particular area for some months. Only in one instance has he seen half a dozen people, closely related, from one village affected one after the other during the course of a few weeks. During the 12 years that he has been working in the Protectorate he has seen only one primary stage case and that was towards the end of 1932.

Gonorrhoea. There is no doubt that this disease and its effects are extending throughout the Territory. In 1929, 161 cases were reported; in 1930, 472 cases; in 1931, 232 cases, and in 1932, 412 cases. The delayed and permanent effects of the disease are showing themselves by the increasing number of women who are found at the Dispensaries to be suffering from Salpingitis. In 1930, there were 17 cases; in 1931, 56 cases; and in 1932, 124 cases. In time this is bound to reduce very seriously the birth rate.

Tuberculosis. There can be no question but that Tuberculosis is on the increase as shewn by the progressively larger number of cases seen among the Dispensary Outpatients. In 1930, there were 165 cases; in 1931, 205 cases; and in 1932, 340 cases. No doubt new infections do take place at the natives' homes, as shown by the fact that women and children are discovered to have active lesions, though the general impression of the Medical Officers is that by far the larger number affected are men who developed evidence of infection after their return from working on the mines. One Medical Officer says:- "One regrets the number of cases of Pulmonary Tuberculosis met with in Dispensary work who give a history of Mine service."

Influenza. During the months from June to November a very widespread epidemic of Influenza swept through the whole country, commencing in the South and spreading gradually North and out West to Ngamiland. It was quite impossible to get accurate figures as to the incidence. In most of the districts the Doctors estimate that from 50% to 75% of the total population were affected. No figures are available from which the death rate could be arrived at, but generally it was low. A feature of the epidemic was that many of the cases were complicated by haemorrhages, epistaxis, haemoptisis or from the bladder or bowel. In all the cases which came for treatment these cleared up without ill-effects. Pneumonia as a complication was responsible for most of the deaths that occurred.

Malaria. Since the Malaria epidemic of 1928 and its aftermath in 1929 there has been a gradual but marked decrease in the incidence. Out of 30,006 first attendances at the Dispensaries this year, only 617 cases of Malaria were recorded, as compared with 1928 when there were 4,523 cases out of 16,800 first attendances.

The following table has been drawn up to compare Malarial incidence with the annual rainfall in the years 1928, 1930 and 1932, at four of the stations that have always been regarded as highly Malarious :

<u>Station</u>		<u>1928</u>	<u>1930</u>	<u>1932</u>
Gaberones	Rainfall	25.12 inches	23.65 inches	13.95 inches
	Malaria	1448 cases	169 cases	87 cases.
Serowe	Rainfall	10.04 inches	12.66 inches	16.98 inches
	Malaria	292 cases	169 cases	143 cases
Maun	Rainfall	16.55 inches	10.20 inches	24.59 inches
	Malaria	113 cases	241 cases	104 cases
Francistown	Rainfall	15.73 inches	19.30 inches	28.52 inches
	Malaria	353 cases	225 cases	125 cases
Whole Territory	Av. Rainfall	18.35 inches	19.33 inches	19.95 inches
	Malaria	4523 cases	1428 cases	617 cases
Total first attendances at Dispensaries.		16,800.	29,500.	30,006

It will be seen that only in the case of Gaberones has there been a reduction in the Malarial incidence corresponding with a lower annual rainfall. At the other stations the rainfall in 1932 was higher than in 1928 and yet there was less Malaria.

In connection with Malaria the Protectorate was extremely fortunate in having had the privilege of a short visit from Sir Malcolm Watson of the Ross Institute who was in South Africa to advise on Malarial control at certain Copper Mines in Northern Rhodesia. Sir Malcolm's visit, which he most kindly undertook voluntarily, was at the end of April which is at the end of the Summer rainy season and which therefore is the period of the year when Malaria (when it occurs) is at its highest. He visited certain villages situated near rivers and water courses in the Gaberones and Mochudi districts and himself examined the spleens of 600 children. Only 7 spleens were palpable. The blood of five of the children whose spleens were enlarged was carefully examined for Malarial parasites, but none were observed. It is therefore possible that the splenic enlargements may have been due to some cause other than Malaria. He investigated the rivers, which had plenty of water, and the adjoining pools. These were found to swarm with Culicine larvae, but no Anophelene. From these observations Sir Malcolm Watson deduced that in the parts visited by him Malaria had been negligible or absent during the previous two Summers - thus confirming the statistical evidence shown in the above table. No figures are available to show what the Malarial incidence was, say, 30 years ago. Old residents consider that it is now not nearly as severe or as prevalent as it was then. Whatever it may have been in former times, it would appear

that at present for periods of three or four years, only in certain isolated localities, does a residue of Malaria remain permanently and that in very low endemic form. When a rainy season occurs in which the rainfall is evenly distributed and so is favourable to the growth and spread of *Anopheles Costalis* (which is the chief vector in the Protectorate) an epidemic commences in those residual "foci" and spreads from them to the other regions from which Malaria has for several years been absent. It is therefore conceivable that if those particular localities where there are mild endemic "foci" could be determined, the breeding sites dealt with, and all persons near them capable of harbouring the parasite in its sexual form, treated with Plasmoquine, the disease might be eradicated from most of this Territory.

As things are at present, it would be a very serious mistake to create an impression that Malaria in the Protectorate is disappearing for good. The experience of those who saw the epidemic of 1928 makes one realise what a formidable scourge such an epidemic can be.

As shown in the above table, it is impossible to forecast simply from the amount of annual rainfall in any given place whether a Malarial epidemic will occur there or not. Other factors influencing the breeding of *Anophelene* larvae have to be considered. The chief one no doubt is the distribution of rainfall throughout the Summer. Very heavy rains followed by long dry spells may give a big total rainfall for the year, but with less favourable conditions to *Anophelene* breeding, than a lesser total rainfall which is more evenly distributed. There are probably other agencies at work determining the propagation and spread of *Anopheles*

Costalis which would require the observations of a trained Entomologist.

One has heard it stated that these Malarial epidemics occur in cycles of 5 or 6 years, but insufficient records are as yet available to make an assertion on this point. If the impression of such cycles is correct, then there should be an epidemic in 1933 or 1934. Vigilance is accordingly being maintained.

Blackwater Fever. 3 Cases occurred at Maun - 2 in natives and 1 in a European child. The 2 former died, while the latter recovered.

Smallpox. There were no serious outbreaks during the year under review; but 12 cases of Alastrim were reported - 7 from a small area in the Okavango marshes. This was in the nature of an epidemic. Prompt measures of quarantine and vaccination quickly smothered it and there was no further spread. In the Francistown district there were 2 isolated cases of Alastrim.

Plague. No cases have occurred in the Territory. In 1917 a rodent mortality was observed near and around Serowe but no case of human Plague occurred. In 1931 rodent mortality was noted and reported by a traveller in the centre of the Kalahari (Lat.22, Long.24). No specimens were obtained and the expense of sending out an expedition to those remote and almost uninhabited areas precluded further investigation. Following an outbreak of human Plague in South West Africa in May, 1932, the Union Health Department sought to trace the source of that infection and sent a Rodent Inspector to survey the whole area adjacent to the Northern boundary of the Cape Province. Facilities were gladly afforded by this Administration for him to survey the adjoining part of this Protectorate, namely, the Southern Kalahari.

His observations led him to conclude that there had been, two or three years previously, extensive rodent mortality spreading from the Cape into the Kalahari, though at the time of his investigation he saw no signs of any rodent Plague. It was therefore assumed that the Plague outbreak in South West Africa was due to this spread of rodent Plague from the Cape Province through the South-Western portion of the Kalahari into South West Africa, though careful enquiry from Kalahari Police and animal trappers who are constantly travelling about that portion of the Protectorate, through which the disease is assumed to have gone, failed to confirm the premise that there had been rodent Plague as no special mortality among rodents had been noticed by them. Be that as it may - with definite evidence of rodent Plague in the neighbouring Territory on our Eastern and Southern boundaries, it is not unlikely that rodent Plague may have existed in certain portions of the Protectorate, which has escaped detection. Vigilance for any occurrence of rodent mortality is therefore being maintained.

Cerebro-spinal Meningitis. 4 Cases of this disease occurred at Lobatsi village. The first occurred in March and the last in August of 1932. Three of the patients died and one recovered, giving a mortality of 75%. Efforts to locate a possible carrier were unsuccessful.

SECTION III. - HYGIENE AND SANITATION.

Hygiene. In previous Annual Reports emphasis has been laid on the poor physique of the Bechuana generally as compared with European standards and also with those of

other Native tribes in South Africa. One Medical Officer reports that of 500 adult males examined by him as to their fitness for work on the Gold Mines, the average weight was 8 stone, 13 lbs. Of these he rejected 33% on account of poor physique - this after the recruiting agent had surveyed the recruits and had rejected those who, to his layman's eye, were obviously not worth putting forward for medical examination.

There can be no doubt that nutritional defects during the years of growth are an important factor. In support of this the writer when visiting a tribal school with the Inspector of Education, was struck with the lean and hungry look among a group of some 80 children aged from 10 to 14 years; there was a lack of keenness in their work; they were listless and apathetic. The class work was stopped and enquiries were made regarding their diet. It was ascertained that 60 out of the 80 had had no food since the previous afternoon. It appears that most of these children generally come to school without a breakfast meal and they get only the one meal of the day on their return home from school about 4 p.m., this meal generally consisting of maize or Kaffir-corn porridge, with perhaps some tea, but seldom anything else. There is no variety or balance in their diet except during three Summer months when they go with their parents to the cattle posts or agricultural lands, and can then get milk, wild spinach, green maize cobs and pumpkin. Of these 80 children only 10 had had milk in any shape or form during the previous three months. Enquiries from the other classes in the school revealed a similar state of affairs. The reason for their not having had a morning meal was apparently due to indifference or apathy on the part of

their parents as they mostly had good grain supplies. And the reason for their not getting milk was because the cows were at the cattle posts many miles away from the large tribal village or township in which they lived and too far away for milk to be brought in regularly. It was further ascertained that the teachers, two of whom had spent several years at wellknown native teacher training colleges and were well educated, had not realised the necessity for enquiring into such unimportant matters as the bodily wellbeing of their pupils! They stated that during their training as teachers their lessons in Hygiene consisted of "how the body works" - action of the heart, gastric and intestinal juices, etc. - in other words, physiology, the more practical and elemental aspects having evidently been neglected. Such evidence goes to support the often-heard criticism that the tendency in education of natives is to give too much attention to the purely scholastic side on European lines, and not enough of the practical subjects which would go to make useful peasants and good home-makers. It will be interesting to watch the results of the few native schools where only recently the Jeanes System has been instituted and where the practical training in better methods of building, simple agriculture and animal husbandry are given as much, if not more, importance than the scholastic instruction and passing of examinations in those subjects more suited to European civilization than to the present stage of development of South African natives generally.

The following table is produced to show the difference between the average weight of Bechuana school children

at the various ages, and that of standard weights of European children of the same ages :-

Table Showing Comparative Weights of Bechuana School Children and that of Standard European Children of same age groups. (Three Bechuana Tribes - 1,247 children).

Age in years	Bechuana Weight in lbs.	Standard European Weight in lbs.	Percentage Ratio weight Bechuana to European.	Bechuana below European standard per cent
7	48	48	100%	-
8	49 $\frac{3}{4}$	53	93.9%	6.1%
9	49 $\frac{3}{4}$	56	88.8%	11.2%
10	56	63	88.9%	11.1%
11	59 $\frac{1}{4}$	69	85.9%	14.1%
12	64 $\frac{1}{2}$	76 $\frac{1}{2}$	84.5%	15.5%
13	68 $\frac{1}{4}$	86	79.4%	20.6%
14	74 $\frac{1}{2}$	95	78.4%	21.6%
15	82	105	78.1%	21.9%
16	87 $\frac{1}{2}$	114	76.8%	23.2%
17	95 $\frac{1}{4}$	120	79.4%	20.6%
18 & ^x over	110 $\frac{1}{2}$	125	88.4%	11.6%

x As a large proportion are 18 to 21 years of age, the weight for 18 years is higher than it should be.

From this table it will be seen that up to the age of eight years the Mochuana child is as heavy as the European child of that age. It is after eight years of age that the drop in weight occurs and continues to do so progressively until 15 or 16. These weights are of children living in the large Tribal native villages. When opportunity occurs this investigation will be pursued with regard to children living permanently on cattle posts where they can get milk more or less all the year round.

It might be claimed that the difference in weight between adolescent Bechuana and that of Europeans of the same age is influenced by a racial peculiarity; but it is very unlikely that racial peculiarity 'per se' would account for such a marked difference. It can therefore be assumed with little doubt that other deteriorating influences are at work, the principal one of which is malnutrition at a growing age.

Systematic routine school medical inspections are now being carried out at the larger Tribal schools in proximity to the Medical Officers.

Social and Welfare Work. Towards the end of 1932 a trained nurse specially qualified in Welfare work among woman and infants was appointed at Serowe under the aegis of the London Missionary Society, with a substantial subsidy from Government towards her salary. She has commenced Mothercraft classes for married women, Ante- and Post-natal Clinics, and classes for adolescent girls. Great importance is attached to work of this nature. Hospitals, Dispensaries for Out-patients and lessons in Hygiene at school are all of undoubted value; but we are coming to realize that the influence of these is limited and not put to practical use. Therefore, practical demonstrations and work among the mothers, in their homes, is being undertaken. It is hoped that next year one - or perhaps two - native women who have undergone a "Jeanes" training at Hope Fountain School in Southern Rhodesia will be posted in other centres. By these agencies it is hoped gradually to have influences at work that will raise the standard of hygiene and "homeculture" throughout the Territory.

Sanitation. Lack of funds has prevented any scheme being

undertaken to ameliorate the sanitation of the native townships. But it is worth recording that the Chief of the Mangwato at Serowe has, on his own initiative and at his own expense, installed for his private residence a small water-borne sewage system connected with a septic tank, which gives satisfactory results. Except for the two water-borne systems of sanitation at the Government Hospitals and the one referred to above, the "bucket" system is that in general use in European communities. In native villages and townships no attempt has been made to introduce any particular sewage system as it is felt that until the natives themselves show an interest and desire to improve the sanitation of their villages any scheme devised by Government would be a complete failure, unless it had their whole-hearted co-operation. It is therefore considered advisable to leave things as they are and trust to scavenging animals, the disinfecting power of the sun, and the flushing effect of heavy rain storms for cleaning the villages and surrounding area.

Most of the houses occupied by natives consist of grass-thatched, round huts, with mud floors, the average diameter being 12 ft. and the walls 6 ft. in height. For each family there are generally two such huts - one for a dwelling and one for a grain store. It is estimated that there is an average of four persons per hut. However, among the Bakgatla Tribe, and among the more prosperous of the other Tribes, there are three huts per family, the huts themselves being much larger both in diameter and height. Improvement in housing conditions can only come with a general raising of the standard of living and the hygienic and sanitary conception of the people.

When approaching the question of hygiene and sanitation

in this Territory it must always be realised that the inhabited parts of Bechuanaland are on the border of a semi-desert - the Kalahari - and that for a pastoral and agricultural country the scanty supplies of surface water are a serious handicap to the economic conditions of the inhabitants, and make it difficult for the Bechuana to have gardens from which they could supply themselves with green vegetables, or to observe the same habits of cleanliness that obtain among people who have plentiful water supplies. It is generally recognised that this country, in common with most of South Africa, shows definite signs of desiccation. Springs and streams that some twenty-five years ago were perennial have now dried up. Resort has been made to wells for watering cattle and for household purposes, but generally very little attempt has been made towards the conservation of water. Lack of financial resources has prevented many such schemes being carried out. Unless meteorological conditions alter and improve, the distribution of rainfall so that it is more evenly distributed during the normal rainy season, and unless something is done to conserve the rainwater, which rushes down the water-courses and is lost to the country, the outlook for coming generations is very disquieting.

SECTION IV - HOSPITALS AND DISPENSARIES.

Dispensaries. During the year under review there were 45,654 total Out-patient attendances; of these 30,006 were first attendances and the remaining 15,648 were subsequent visits.

The following table shows at a glance the total number of attendances during the past five years :-

	<u>1928</u>	<u>1929</u>	<u>1930</u>	<u>1931</u>	<u>1932</u>
Total attendances.	25,864	17,050	36,195	33,298	45,653

The distribution of attendances during the year 1932 being as follows :-

<u>Station</u>	<u>First attendances</u>	<u>Subsequent attendances</u>	<u>Total attendances</u>
Francistown	3,135	1,866	5,001
Serowe	4,014	2,931	6,945
Gaberones	2,263	668	2,931
Molepolole (Med.Missionary)	2,117	5,327	7,444
Mochudi (Visited by Govt.M.O. from Gaberones).	1,180	(not recorded)	1,180
Lobatsi	2,122	2,441	4,563
Kanye (Med.Missionary)	12,956		12,956
Mafeking	879	679	1,558
Ngamiland	1,340	1,735	3,075
	<u>30,006</u>	<u>15,647</u>	<u>45,653</u>

As Mochudi was without a Medical Missionary except for six weeks of the year, the Medical Officer from Gaberones (30 miles distant) visited there for consultations once a fortnight throughout the year; and for two months he paid weekly visits to Molepolole (also 30 miles distant) during the absence of Dr. Shepherd, Medical Missionary at Molepolole.

In previous reports attention has been drawn to the necessity for supplying medical aid to outlying villages situated long distances from District Headquarters.

Shortage of trained native personnel and lack of additional funds necessary to finance outlying Dispensaries has prevented expansion in that direction; but it is the aim of the Administration when funds are available to establish such outposts where Medical Officers could visit once a month. For these areas at distances of over 75 miles from District Medical Officers' Headquarters the only solution would be by means of travelling Dispensaries. Here again, shortage of funds prevents such a scheme being put into action.

Hospitals. These comprise two well-equipped Government Hospitals each having accommodation for 4 European and 20 Native patients, besides cottage Mission Hospitals for natives at Kanye (12 beds) and Molepolole (6 beds). During the year the Dutch Reformed Church Mission built a 12 bedded native Hospital at Mochudi which was ready to receive patients early in October, but as the Mission had no Doctor it has not yet commenced to function. There is, however, every probability of a Doctor being secured early in 1933. The erection of cottage Hospitals at Francistown and specially at Maun, Ngamiland, are necessary. At present, the nearest Hospital in the Territory to Francistown is at Serowe, a distance of 140 miles, while the nearest Hospital to Maun is Livingstone in Northern Rhodesia, a distance of 300 miles. At Francistown the Medical Officer does what he can with two very indifferent thatched huts, and at Maun no provision at all has been possible owing to lack of funds: and patients are treated in their miserable homes. Medical work in remote areas is very seriously handicapped when the Doctor has not got a hospital wherein to give patients reasonable treatment and attention.

The requirements of these stations would be met by the erection and staffing of unpretentious small 12 bedded native Hospitals, with provision for one or two European patients.

During 1932, 565 Inpatients were treated in the Government Hospitals and 163 in the Mission Hospitals - a total of 728 Inpatients, as compared with 579 Inpatients in 1931 and 207 in 1930. There were 39 deaths among Inpatients.

Surgical work is still in its initial stages owing to the reluctance of natives to undergo operations. It is hoped that as the 21 major abdominal operations performed were all discharged cured without a single fatality, such results will help to dispel the innate fear of surgical treatment.

The training of native girls as nurses is being pursued and some of them show remarkable aptitude for the work. Unfortunately 2 of the 5 who had been in training for over a year, and who were shaping very satisfactorily, left to get married. However, even such training as they received will not be lost as it will enable them to carry into their homes a cultural and hygienic outlook that they would not otherwise have had. This Territory is associated in an endeavour initiated by the Institute of Race Relations of Johannesburg to formulate a scheme for the training and certification of native nurses for work in rural areas. The first step was taken at a Conference in Bloemfontein in 1932. There it was generally recognised that native girls who had gone through the training and had passed the necessary examinations for the full Trained Nurse's Certificate, were in most cases disinclined to work in the rural areas of the Native Reserves. They preferred to

work in the native locations which form part of the large towns of the Union of South Africa, and where - up to the present - they have had no difficulty in finding Municipal employment. At this Conference a Committee of Doctors and representatives of the South African Trained Nurses' Association was appointed to investigate the feasibility of establishing a course which would give such a training as would more appropriately meet the requirements of natives living in rural areas - having specially in view their present stage of development. It is at present the aim of this Administration to develop native nurses' training on those lines rather than for the full certificate required for registration of European nurses.

Hospital Additional Buildings. After the opening of the Government Hospitals at Lobatsi and Serowe it was realized that provision had to be made for isolating infectious and Syphilitic cases, and additional accommodation was required for the nursing staff, especially native nurses in training - male and female. A loan of £4,000 having been obtained for this purpose from the Colonial Development Fund, the following buildings and alterations were carried out at Lobatsi :-

- (1) Isolation block consisting of two wards each to hold 4 beds, a spacious gauzed-in verandah, and a bathroom with sink.
- (2) Shelters for accommodating Syphilitic patients from long distances, who are not suitable cases for Hospital admission but who nevertheless require to be near the Doctor for a course of treatment. A building consisting of six separate rooms was erected. These rooms open on to a cemented courtyard surrounded by a five foot wall. This enables

such patients to live - cooking, etc., for themselves at no maintenance cost to Government.

- (3) Additional accommodation for Nursing Staff. The accommodation originally supplied for the Nursing Staff was totally inadequate. The male and female Native Nurses were obliged to share respectively the two rooms provided for them with the other native attendants, cooks, etc. The European Nursing Sisters were occupying as bedrooms accommodation originally intended for patients. The following were therefore supplied :- 2 Bedrooms and living room for Female Native Nurses; 2 rooms for male Native Nurses and Attendants; a Sitting Room and three Bedrooms for the European Nursing Staff.

A feature of this building scheme is that all the work has been done by native brickmakers, builders and carpenters, supervised by the Government European Superintending Clerk of Works, under the direction of the Medical Department, instead of by European contract labour as has hitherto been the practice in the Territory. The results achieved have been excellent. Not only are the buildings of first-rate workmanship, but by utilizing native artizans they were completed with such saving on the original estimate that actually considerably more has been done for the money than was at first proposed. In addition, the native workmen have had the benefit of a very valuable "post graduate" course of instruction; and most of them, who were unable to find employment after they had left the technical schools, have been able to earn good wages.

The success of a building scheme of this nature by native labour is dependent on the European Supervisor. The

Supervisor in this case, besides being a first-class builder, possesses exceptional qualities for instructing and guiding native artisans and labourers in their work.

Medical Missions. Before closing this section of the Report it is necessary to draw attention to the excellent work that has been done during the year by Medical Missionaries stationed at Kanye under the control of the Seventh Day Adventist Mission and at Molepolole under the control of the United Free Church of Scotland in association with the London Missionary Society, and - in previous years - by the Dutch Reformed Church Mission Doctor at Mochudi. The large numbers of native out-patients who go to their Dispensaries for treatment and the considerable number successfully treated in their Cottage Hospitals, speak for themselves, and reflect the confidence that natives are putting in them. The service given to the natives of the Territory by these Medical Missionaries far exceeds in value such contributions as Government makes in the way of subsidies to their Missions. The relations between these Medical Missionaries and the Government Medical Department are of the happiest. They are ever ready to co-operate in any programme of work for native development that the Administration requires of its Government Medical Officers. The day of the Medical Missionary is far from being past. It would be difficult to conceive of a better return for money provided for Medical work among natives than by subsidising Medical Missions - provided the Doctors are zealous and efficient and show the same willingness to co-operate with an Administration as the Missionaries at present working in the Protectorate.

SECTION V. PRISONS AND ASYLUMS.

With the exception of the prison at Maun where a new prison is required, the prisons throughout the Territory are hygienic and sanitary. The use of "Shelltox" spray is proving very efficient in keeping down infection by the common house bug. The application of this preparation is simple, economical and free from the dangers attendant upon deverminising by Cyanide gas.

The health of the prisoners throughout the year has been good. Most of them suffered from the Influenza epidemic, but without any mortality.

There are no asylums in the country. All lunatics who are a danger to themselves or to others are sent for treatment to Mental Hospitals in the Union of South Africa. Harmless imbeciles are cared for by their relatives.

H. W. DYKE,

Principal Medical Officer.

A P P E N D I X I.

OUTPATIENTS FOR THE YEAR 1932.

DISPENSARIES.

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
I. <u>EPIDEMIC, ENDEMIC and INFECTIOUS DISEASES.</u>	13,551	3. Ticbite Fever	1
		5. Malaria:	298
		(a) Tertian	304
		(b) Quartan	15
		(c) Blackwater	3
		6. Smallpox:	
		Alastrim	9
		7. Measles	4
		9. Whooping Cough	102
		11. Influenza	2,437
		13. Mumps	2
		16. Dysentery:	6
		(a) Amoebic	31
		(b) Bacillary	8
		(c) Undefined or due to other causes	6
		20. Leprosy	12
		21. Erysipelas	1
		24. Epidemic Cerebro-spinal Fever	4
		25. Other Epidemic Diseases :	
		(b) Varicella (Chicken-pox)	11
		(g) Yaws	118
		27. Anthrax	1
		31. Tuberculosis, Pulmonary and Laryngeal	281
		34. Tuberculosis of the Vertebral column	15
		35. Tuberculosis of Bones and Joints.	8
		36. Tuberculosis of other organs :	
		(b) Bones	5
		(c) Lymphatic System	30
		37. Tuberculosis disseminated :	
		(b) Chronic	1
Carried forward	13,551		3,713
		28.	

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward	13,551		3,713
1. EPIDEMIC, ENDEMIC and INFECTIOUS DISEASES (Contd.)		38. Syphilis: (a) Primary (b) Secondary (c) Tertiary (d) Hereditary (e) Period not indicated	20 684 1,933 1,204 5,571
		39. Soft Chancre	1
		40. A. Gonorrhoea and its complications: C. Gonorrhoeal Arthritis	412 7
		41. Septicaemia	6
II. GENERAL DISEASES not mentioned above.	1,211	44. Cancer or other malignant Tumours of the Stomach or Liver	4
		46. Cancer or other malignant Tumours of the Female Genital Organs	1
		47. Cancer or other malignant Tumours of the Breast	3
		49. Cancer or other malignant Tumours of Organs not specified	1
		50. Tumours, non-malignant	75
		51. Acute Rheumatism	100
		52. Chronic Rheumatism	786
		53. Scurvy (including Barlow's Disease)	108
		56. Rickets	1
		57. Diabetes (not including Insipidus)	2
		58. Anaemias: (b) Other Anaemias and Chlorosis	104
		60. Diseases of the Thyroid Gland : (a) Exophthalmic Goitre (b) Other diseases of the Thyroid Gland, Myxoedema	1 1 1
		65. Leukaemia: (b) Hodgkin's Disease	4
		66. Alcoholism	11
		69. Other General Diseases . Auto-Intoxication Purpura Haemorrhagica	2 6
Carried forward	14,762		14,762
		29.	

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward	14,762		14,762
III. AFFECTIONS OF THE NERVOUS SYSTEM and ORGANS OF THE SENSES.	1,238	72. Locomotor Ataxia	1
		73. Other Affections of the Spinal Cord	1
		75. Paralysis : (a) Hemiplegia	11
		(b) Other Paralyses	12
		77. Other Forms of Mental Alienation	10
		78. Epilepsy	14
		79. Eclampsia, Convulsions (non-puerperal) 5 years or over	2
		80. Infantile Convulsions	4
		81. Chorea	2
		82. A. Hysteria	6
		B. Neuritis	78
		C. Neurasthenia	25
		83. Cerebral Softening	8
		84. Other Affections of the Nervous System, such as Paralysis Agitans	3
		85. Affections of the Organs of Vision : (a) Diseases of the Eye	155
		(b) Conjunctivitis	608
		(c) Trachoma	39
		(d) Tumours of the Eye	2
		(e) Other Affections of the Eye	77
		86. Affections of the Ear or Mastoid Sinus	180
IV. AFFECTIONS OF THE CIRCULATORY SYSTEM.	843	87. Pericarditis	1
		88. Acute Endocarditis or Myocarditis	12
		89. Angina Pectoris	1
		90. Other Diseases of the Heart : (a) Mitral	276
		Aortic	293
		Tricuspid	33
		Pulmonary	40
		(b) Myocarditis	24
		91. Diseases of the Arteries : (a) Aneurism	2
		(b) Arterio-Sclerosis	27
Carried forward	16,843		16,709
		30.	

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward	16,843		16,709
IV. AFFECTIONS OF THE <u>CIRCULATORY SYSTEM (Contd.)</u>		93. Diseases of the Veins : Haemorrhoids Varicose Veins	44 50
		94. Diseases of the Lymphatic System : Lymphadenitis, Bubo (non-specific)	6
		95. Haemorrhage of undetermined cause	19
		96. Other affections of the Circulatory system	15
V. AFFECTIONS OF THE <u>RESPIRATORY SYSTEM.</u>	2,149	97. Diseases of the Nasal Passages : Adenoids Polypus Rhinitis Coryza	31 6 17 97
		98. Affections of the Larynx : Laryngitis	132
		99. Bronchitis : (a) Acute (b) Chronic	952 619
		100. Broncho-Pneumonia	91
		101. Pneumonia : (a) Lobar (b) Unclassified	123 14
		102. Pleurisy, Empyema	20
		103. Congestion of the Lungs	2
		105. Asthma	45
VI DISEASES OF THE DIGESTIVE <u>SYSTEM.</u>	6,493	108. A. Diseases of Teeth or Gums : Caries, Pyorrhoea, etc. b. Other Affections of the Mouth : Stomatitis Glossitis, etc.	2,807 142 11
		109. Affections of the Pharynx or Tonsils : Tonsillitis Pharyngitis	230 25
		110. Affections of the Oesophagus	1
		111. B. Ulcer of the Duodenum	6
Carried forward	25,485		22,214
		31.	

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward	25,485		22,214
VI. DISEASES OF THE DIGESTIVE SYSTEM, (Contd.)		112. Other Affections of the Stomach:	
		Gastritis	66
		Dyspepsia, etc.	277
		113. Diarrhoea and Enteritis :	
		Under two years	164
		114. Diarrhoea and Enteritis :	
		Two years and over	110
		Colitis	5
		116. Diseases due to Intestinal Parasites :	
		(a) Cestoda (Taenia)	53
		(c) Nematoda (other than Ankylostoma	5
		Ascaris	19
		Oxyuris	36
		(f) Unclassified	7
		117. Appendicitis	44
		118. Hernia	26
		119. A. Affections of the Anus, Fistula, etc.	2
		B. Other affections of the Intestines:	
		Enteroptosis	1
		Constipation	2,438
		122. Cirrhosis of the Liver :	
		(a) Alcoholic	4
		123. Biliary Calculus	2
		124. Other affections of the Liver :	
		Abscess	4
		Hepatitis	3
		Cholecystitis	2
		Jaundice	1
		126. Peritonitis (of unknown cause) .	1
		127. Other affections of the Digestive System :	1
VII. DISEASES OF THE GENITO URINARY SYSTEM. (Non-Venereal).	871	128. Acute Nephritis	11
		129. Chronic	1
		130. B. Schistosomiasis	5
		131. Other Affections of the Kidneys: Pyelitis, etc.	31
	26,356		25,533
		32.	

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward	26,356		25,533
VII. DISEASES OF THE GENITO- URINARY SYSTEM (Non- Venereal) (Contd.)		133. Diseases of the Bladder : Cystitis	69
		134. Diseases of the Urethra : (a) Stricture (b) Other	7 5
		135. Diseases of the Prostate : Hypertrophy Prostatitis	12 5
		136. Diseases (non-Venereal) of the Genital Organs of Man : Epididymitis Orchitis Hydrocele Ulcer of Penis	7 7 3 2
		137. Cysts or other non-malignant Tumours of the Ovaries	13
		138. Salpingitis : Abscess of the Pelvis	120 4
		139. Uterine Tumours (non-malignant)	8
		140. Uterine Haemorrhage (non- puerperal)	75
		141. A. Metritis B. Other affections of the Female Genital Organs : Displacement of Uterus Amenorrhoea Dysmenorrhoea Leucorrhoea	12 86 68 200 105
		142. Diseases of the Breast (non- puerperal) : Mastitis Abscess of Breast	4 11
VIII. PUERPERAL STATE.	127	143. A. Normal Labour B. Accidents of Pregnancy : (a) Abortion (c) Other Accidents of Pregnancy	34 9 13
		144. Puerperal Haemorrhage	1
		145. Other accidents of Parturition	14
		146. Puerperal Septicaemia	6
		149. Sequelae of Labour	9
		150. Puerperal affections of the Breast Ante-Natal Examinations	12 29
Carried forward	26,483	33.	26 483

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward	26,483		26,483
IX. <u>AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.</u>	479	151. Gangrene	1
		152. Boil : Carbuncle	32 1
		153. Abscess : Whitlow Cellulitis	16 39 17
		154. A. Tinea B. Scabies	24 23
		155. Other Diseases of the Skin : Urticaria Eczema Herpes Psoriasis	106 209 5 6
X. <u>DISEASES OF BONES AND ORGANS OF LOCOMOTION (other than Tuberculous)</u>	97	156. Diseases of Bones : Osteitis	4
		157. Diseases of Joints : Arthritis Synovitis	53 38
		158. Other Diseases of Bones or Organs of Locomotion	2
XI. <u>MALFORMATIONS.</u>	4	159. Malformations : Hydrocephalus Hypospadias	1 2 1
XII. <u>DISEASES OF INFANCY.</u>	153	160. Congenital Debility (Cretinism). 161. Premature Birth 162. Other Affections of Infancy	1 2 18
		163. Infant neglect (infants of 3 months or over)	132
XIII <u>AFFECTIONS OF OLD AGE.</u>	1	164. Senility : Senile Dementia	1
XIV. <u>AFFECTIONS PRODUCED BY EXTERNAL CAUSES.</u>	726	166. Corrosive Poisoning (intentional) 176. Attacks of poisonous animals : Snake Bite Insect Bite 177. Other Accidental Poisonings 178. Burns (by fire) 179. Burns (other than by Fire)	1 14 36 2 67 24
Carried forward	27,943		27,361
34.			

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward	27,943		27,361
XIV. <u>AFFECTIONS PRODUCED BY EXTERNAL CAUSES (Contd.)</u>		183. Wounds (by Firearms, war excepted)	13
		184. Wounds (by cutting or stabbing instruments).	294
		185. Wounds (by fall)	49
		187. Wounds (by Machinery).	1
		188. Wounds (crushing e.g. Railway accidents).	51
		189. Injuries inflicted by animals, (Bites, kicks, etc.)	34
		194. Exposure to Heat : Heatstroke	1
		195. Lightning Stroke	28
		198. Murder by cutting or stabbing instruments	5
		199. Murder by other means . .	6
		201. A. Dislocation	8
		B. Sprain	31
		C. Fracture	18
		202. Other External Injuries . .	43
XV. <u>ILL-DEFINED DISEASES.</u>	144	205. A. Diseases not already specified or ill-defined :	
		Ascites	3
		Oedema	1
		Asthenia	127
		B. Malingering	13
XVI. <u>DISEASES, THE TOTAL OF WHICH HAVE NOT CAUSED 10 DEATHS.</u>	1,919		1,919
Total	30,006		30,006

A P P E N D I X II.

Return of Diseases and Deaths - In Patients - for the year 1932.

Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
I. EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.					
1. Enteric group:					
(a) Typhoid Fever . . .	-	1	1	1	-
(d) Type not defined. .	-	1	-	1	-
5. Malaria:	-	9	1	9	1
(a) Tertian . . .	-	4	-	4	-
(e) Blackwater Fever .	-	1	1	1	-
6. Smallpox:					
Alastrim . . .	-	1	-	1	-
9. Whooping Cough. . .	-	5	-	5	-
11. Influenza. . . .	-	27	-	27	-
16. Dysentery:					
(a) Amoebic	-	4	1	4	-
21. Erysipelas	-	1	-	1	-
24. Epidemic Ferebro-spinal Fever	-	4	3	4	-
25. Other Epidemic Diseases:					
(g) Yaws	1	1	-	2	-
31. Tuberculosis, Pulmonary and Laryngeal . . .	2	17	1	19	-
34. Tuberculosis of the Vertebral Column . .	1	1	-	2	-
35. Tuberculosis of the Bones and Joints	2	9	-	11	2
36. Tuberculosis of other Organs:					
(b) Bones	-	2	-	2	-
(c) Lymphatic System . .	3	9	-	12	1
(d) Genito-Urinary . . .	-	2	-	2	-
(e) Other Organs . . .	-	1	-	1	-
37. Tuberculosis disseminated :					
(b) Chronic	1	2	-	3	1
38. Syphilis:					
(b) Secondary	1	5	-	6	-
(c) Tertiary	7	38	2	45	3
(e) Period not indicated .	1	11	3	12	-
Carried forward	19	156	13	175	8
		36.			

Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
Brought forward	19	156	13	175	8
EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES Contd.					
39. Soft Chancre	-	1	-	1	-
40. A. Gonorrhoea and its complications	-	10	-	10	1
40. Septicaemia	-	6	-	6	-
42. Other Infectious Diseases: Tickbite Fever	-	2	-	2	-
II. GENERAL DISEASES NOT MENTIONED ABOVE.					
44. Cancer or other malignant tumours of the Stomach or Liver	-	2	1	2	-
47. Cancer or other malignant tumours of the Breast	-	1	-	1	-
49. Cancer or other malignant tumours of organs not specified	-	1	-	1	-
50. Tumours, non-malignant	-	36	-	36	-
51. Acute Rheumatism	-	3	-	3	-
52. Chronic Rheumatism	-	9	-	9	-
53. Scurvy (including Barlow's disease).	-	6	-	6	-
57. Diabetes (not including Insipidus)	-	2	-	2	-
III. AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.					
75. Paralysis : (a) Hemiplegia	-	2	-	2	-
77. Other Forms of Mental Alienation	-	3	-	3	-
79. Eclampsia, Convulsions (non-puerperal) 5 years and over .	1	-	-	1	-
Carried forward	20	240	14	260	9
		37.			

Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
Brought forward	20	240	14	260	9
AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES. Contd.					
81. Chorea	-	1	-	1	-
82.A.Hysteria	-	2	-	2	-
B.Neuritis	-	2	-	2	-
C.Neurasthenia	-	4	-	4	2
84. Other Affections of the Nervous System, such as Paralysis Agitans . . .	-	2	-	2	-
85. Affections of the Organs of Vision:					
(a) Diseases of the Eye	-	5	-	5	-
(b) Conjunctivitis. . .	-	4	-	4	1
(c) Trachoma	-	1	-	1	-
(e) Other Affections of the Eye	-	10	-	10	-
86. Affections of the Ear or Mastoid Sinus	-	4	-	4	-
IV. AFFECTIONS OF THE CIRCULATORY SYSTEM.					
88. Acute Endocarditis or Myocarditis	-	7	1	7	1
89. Angina Pectoris . . .	-	1	-	1	-
90. Other Diseases of the Heart:					
(a) Mitral	-	3	-	3	-
Aortic	1	2	1	3	-
(b) Myocarditis. . . .	-	1	-	1	-
93. Diseases of the Veins:					
Phlebitis	-	1	-	1	-
94. Diseases of the Lymphatic System:					
Lymphadenitis, Bubo, (non- specific.)	-	2	-	2	-
95. Haemorrhage of undetermined cause	-	1	-	1	-
96. Other affections of the Circulatory System.	-	7	1	7	-
Carried forward	21	300	17	321	13
		38.			

Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
Brought forward	21	300	17	321	13
V. AFFECTIONS OF THE RESPIRATORY SYSTEM.					
97. Diseases of the Nasal passages.					
Adenoids . . .	-	3	-	3	-
Polypus . . .	-	2	-	2	-
99. Bronchitis:					
(a) Acute . . .	-	15	-	15	-
(b) Chronic . . .	2	5	-	7	-
100. Broncho Pneumonia . .	4	10	4	14	-
101. Pneumonia:					
(a) Lobar . . .	-	31	7	31	-
102. Pleurisy, Empyema . .	2	7	1	9	1
103. Congestion of the Lungs.	-	1	-	1	-
105. Asthma . . .	-	3	-	3	-
107. Other Affections of the Lungs:					
Pulmonary Spirochaetosis	-	1	-	1	-
VI. DISEASES OF THE DIGESTIVE SYSTEM.					
108.A.Diseases of Teeth or Gums:					
Caries, Pyorrhoea, etc.	-	2	-	2	-
B.Other Affections of the Mouth:					
Stomatitis . . .	-	1	-	1	-
109. Affections of the Pharynx or Tonsils:					
Tonsillitis . . .	-	14	-	14	1
112. Other Affections of the Stomach:					
Gastritis . . .	-	3	-	3	-
113. Diarrhoea and Enteritis:					
Under 2 years. . .	-	3	-	3	-
114. Diarrhoea and Enteritis:					
2 Years and over . . .	-	3	-	3	-
116. Diseases due to Intestinal Parasites:					
(a) Cestoda (Taenia)	-	3	-	3	-
(c) Nematoda (other than Ankylostoma) . . .	-	2	-	2	-
Carried forward	29	409	29	438	15
		39.			

Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
Brought forward	29	409	29	438	15
VI. DISEASES OF THE DIGESTIVE SYSTEM. Contd.					
117. Appendicitis . . .	-	8	-	8	1
119. B. Other Affections of the Intestines:					
Constipation . . .	-	14	-	14	-
122. Cirrhosis of the Liver:	-	1	-	1	-
(b) Other forms . . .	-	1	-	1	-
123. Biliary Calculus . . .	-	1	-	1	-
124. Other Affections of the Liver:					
Abscess	-	1	-	1	-
Hepatitis	-	2	-	2	-
Cholecystitis	-	1	-	1	-
125. Diseases of the Pancreas	-	1	-	1	-
126. Peritonitis(of unknown cause)	-	1	1	1	-
127. Other Affections of the Digestive System	-	2	-	2	-
VII. DISEASES OF THE GENITO- URINARY SYSTEM (NON- VENEREAL).					
128. Acute Nephritis	1	4	-	5	1
129. Chronic Nephritis	-	4	-	4	-
130.B. Schistosomiasis	1	1	-	2	-
131. Other Affections of the Kidneys:					
Pyelitis, etc	-	1	-	1	-
132. Urinary Calculus	-	1	-	1	-
133. Diseases of the Bladder:					
Cystitis	-	5	-	5	1
134. Diseases of the Urethra:	-	2	-	2	-
135. Diseases of the Prostate:					
Prostatitis	1	-	-	1	-
136. Diseases (non-Venereal) of the Genital organs of Man:					
Orchitis	-	2	-	2	-
137. Cysts or other non-malignant tumours of the Ovaries	-	6	-	6	-
Carried forward	32	468	30	500	18
		40.			

Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
Brought forward	32	468	30	500	18
VII. DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL) Contd.					
138. Salpingitis: . . .	-	5	-	5	-
Abscess of the Pelvis . . .	-	2	-	2	-
139. Uterine Tumours, (non-malignant)	-	1	-	1	-
140. Uterine Haemorrhage (non- Puerperal)	-	4	-	4	-
141. A. Metritis.	-	7	-	7	-
B. Other Affections of the Female Genital Organs:					
Displacements of Uterus	-	5	-	5	-
Dysmenorrhoea	-	6	-	6	-
VIII. PUERPERAL STATE.					
143. A. Normal Labour	-	8	-	8	-
B. Accidents of Pregnancy:					
(a) Abortion	-	8	-	8	-
(b) Ectopic Gestation	-	1	-	1	-
(c) Other Accidents of Pregnancy	-	4	-	4	-
144. Puerperal Haemorrhage . . .	-	1	-	1	-
145. Other Accidents of Parturition	-	4	-	4	-
150 Puerperal affections of the Breast	-	1	-	1	-
IX. AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.					
152. Boil:	-	1	-	1	-
Carbuncle	-	2	-	2	1
153. Abscess:					
Whitlow	-	2	-	2	-
Cellulitis	-	5	-	5	-
155. Other Affections of the Skin:					
Eczema	-	3	-	3	-
Herpes	1	-	-	1	-
Carried forward	33	538	30	571	19
		41.			

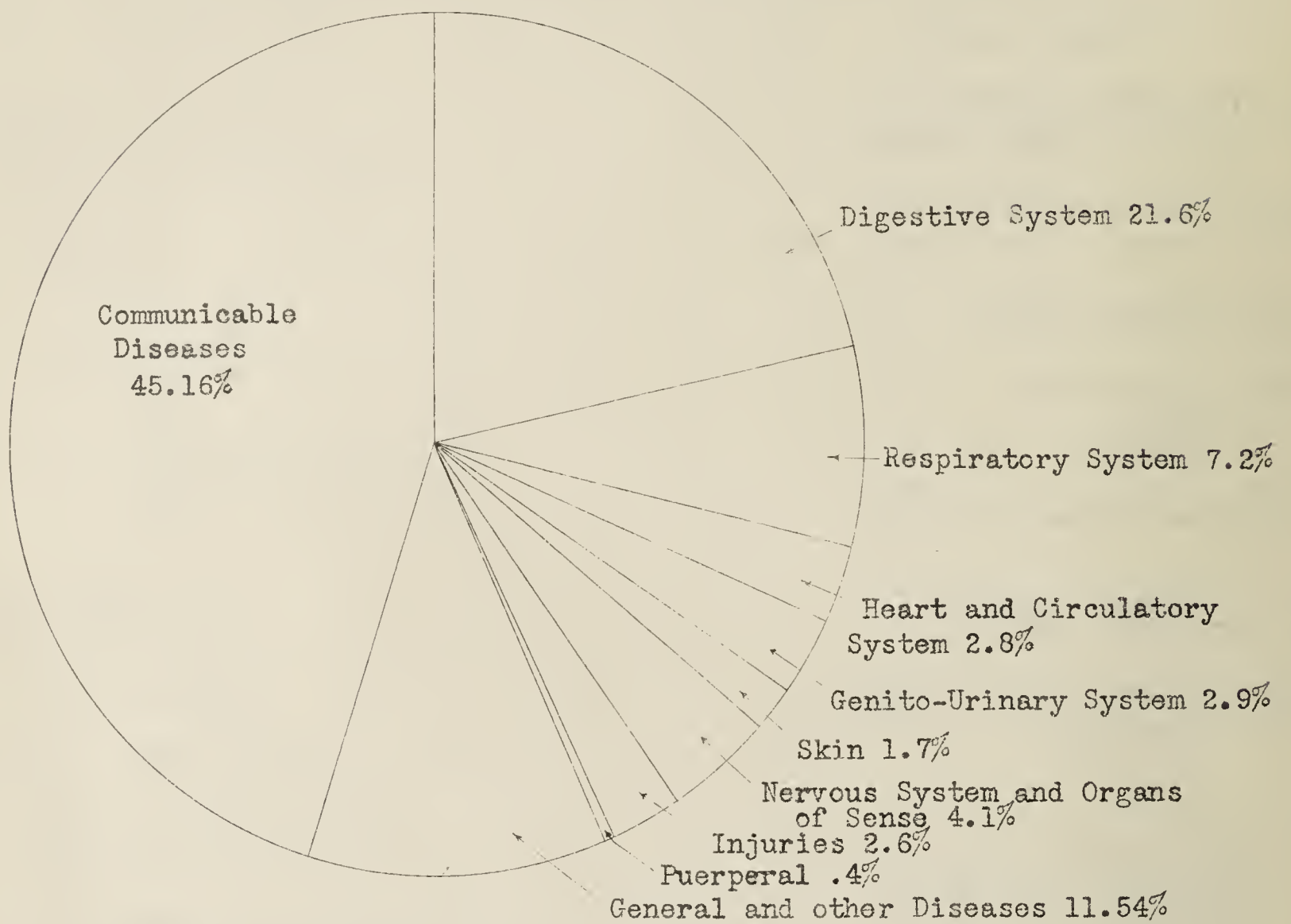
Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
Brought forward	33	538	30	571	19
X. DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS)					
156. Diseases of Bones: Osteitis	-	2	-	2	1
157. Diseases of Joints: Arthritis	3	6	-	9	-
158. Other Diseases of Bones and Organs of locomotion.	-	3	1	3	-
XI. MALFORMATIONS.					
159. Malformations: Hydrocephalus	-	1	-	1	1
XII. DISEASES OF INFANCY.					
162. Other Affections of Infancy	-	4	1	4	-
163. Infant neglect (Infants of three months or over)	-	2	1	2	-
XIII. AFFECTIONS OF OLD AGE.		---			
XIV. AFFECTIONS PRODUCED BY EXTERNAL CAUSES. Contd.					
176. Attacks of poisonous animals:	-	2	1	2	-
Snake Bite	-	3	-	3	-
178. Burns (by fire)	3	10	2	13	-
179. Burns (other than by fire)	-	1	-	1	-
183. Wounds (by firearms, war excepted)	1	8	1	9	3
184. Wounds (by cutting or stabbing instruments)	-	9	-	9	-
185. Wounds (by fall)	-	4	-	4	-
188. Wounds (crushing e.g. railway accidents)	-	3	-	3	1
Carried forward	40	596	37	636	25
		42.			

Diseases.	Remaining in Hospital 1932.	Yearly total		Total cases treated	Remaining in Hospital 1933.
		Admissions	Deaths		
Brought forward	40	596	37	636	25
XIV. AFFECTIONS PRODUCED BY EXTERNAL CAUSES (Contd.)					
189. Injuries inflicted by animals, Bites, Kicks, etc.	-	8	-	8	-
195. Lightning Stroke . .	-	3	-	3	-
201.A. Dislocation . . .	-	2	-	2	-
B. Sprain . . .	-	3	-	3	1
C. Fracture . . .	1	16	2	17	3
202. Other external Injuries	-	18	-	18	1
XV. <u>ILL-DEFINED DISEASES.</u>					
205. A. Diseases not already specified or ill-defined: Asthenia . . .	-	14	-	14	1
XVI. DISEASES, THE TOTAL OF WHICH HAVE NOT CAUSED <u>10 DEATHS</u> . . .	-	27	-	27	-
TOTALS . .	41	687	39	728	31

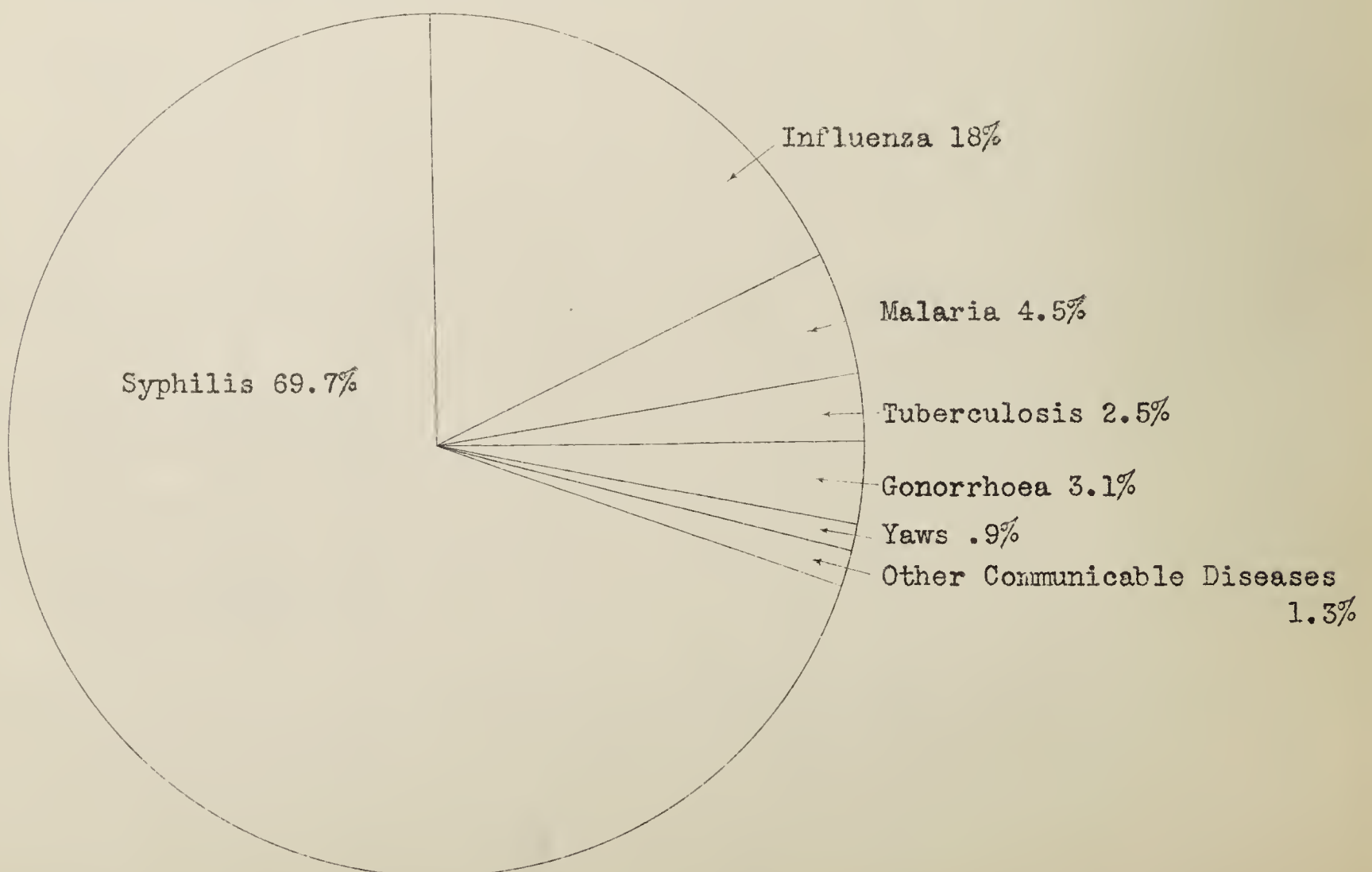
A P P E N D I X I I I .

Diagrams showing incidence of Disease.

1. Total first attendances - 30,006.



2. Communicable Diseases. Total Incidence - 13.551



A P P E N D I X I V.

Operations performed in Government Hospitals and Dispensaries.

Head and Neck.

Excision of Glands	.	.	.	.	.	.	.	3
Enucleation of Eyes	.	.	.	.	.	.	.	2
Iridectomy	.	.	.	.	.	.	.	2
Tonsillectomy	.	.	.	.	.	.	.	10

Abdominal.

Appendicectomy	.	.	.	.	.	.	.	14
Salpingectomy	.	.	.	.	.	.	.	2
Fanhysterectomy	.	.	.	.	.	.	.	1
Prostatectomy (suprapubic)	.	.	.	.	.	.	.	1
Caesarian Section	.	.	.	.	.	.	.	1
Herniotomy	.	.	.	.	.	.	.	2

General.

Orchidectomy	.	.	.	.	.	.	.	3
Amputations	.	.	.	.	.	.	.	3
Excision of Tumours	.	.	.	.	.	.	.	3
D. & C	.	.	.	.	.	.	.	9
Plastic Operations	.	.	.	.	.	.	.	6
Other Minor Operations	.	.	.	.	.	.	.	.1,170

